Cyber Security Breaches Survey 2018: Preparations for the new Data Protection Act

- **Awareness:** 38 per cent of businesses, and 44 per cent of charities, say they have heard of the General Data Protection Regulation (GDPR), which is the foundation of the UK’s new Data Protection Act.

- **Preparation:** Among those aware of GDPR, just over a quarter of businesses and of charities made changes to their operations in response to GDPR’s introduction.

- **Cyber security changes to policy or practices:** Among those making changes, just under half of businesses, and just over one third of charities, said these changes included those to cyber security practices. There was no statistically significant difference between businesses and charities.

- Of the businesses and charities reporting cyber security changes, creating or changing policies was the most common cyber security change recorded. In each case, just over one-third made this change. However, results by type of change should be treated as indicative, owing to the small base sample sizes involved.

**Figure 1: Cyber changes made in preparation for the new Data Protection Act 2018 (GDPR)**

Base (for Figure 1): 174 businesses, 70 charities. The small base size for charities means the figures should only be considered as indicative.
Chapter 1: Introduction

Code of Practice for Official Statistics

This analysis on the new Data Protection Act is taken from the Cyber Security Breaches Survey. The Cyber Security Breaches Survey is an Official Statistic and has been produced to the standards set out in the Code of Practice for Official Statistics.

Background

Released: 24 January 2018

Geographic Coverage: United Kingdom

This statistical release presents information on UK businesses and charities, relating to the introduction of the General Data Protection Regulation (GDPR), which is scheduled for May 2018 and is the foundation of the UK’s incoming Data Protection Act. In particular, it looks at how aware businesses and charities are of the incoming change; how they are actively preparing for the change; and how they are doing this specifically in the area of cyber security.

These statistics are taken from the Cyber Security Breaches Survey, a wider survey which measures how well UK businesses and charities approach cyber security, and also measures the level, nature, and impact of cyber attacks on these organisations. The full survey results, together with findings from qualitative interviews with organisations that have participated in the quantitative survey, is scheduled to be published in April 2018.

The survey is commissioned by the Department for Digital, Culture, Media and Sport (DCMS) as part of the National Cyber Security Programme. It is currently carried out by Ipsos MORI, in partnership with the Institute for Criminal Justice Studies at the University of Portsmouth. This year’s survey was carried out between October and December 2017 and featured responses from 1,519 businesses and, for the first time this year, a sample of registered charities (569 in total).

Please note that, when making comparisons between businesses and charities by size, the number of employees in the organisation (or employees, volunteers and trustees for charities) is used throughout this release. However, income band is a more common measure of size for charities with different behaviours observed across income groups with these results also presented.

If you have any feedback about this statistical release, or would like more information about its contents, please contact us at evidence@culture.gov.uk.
Chapter 2: Awareness of the incoming regulation

The question asked was: Before this interview, had you heard of the General Data Protection Regulation, or GDPR?

It aimed to capture awareness of the GDPR, at a fairly broad level. For example, there is no mention of its implementation or contents.

Data broken down by size groups suggest that those in smaller organisations are less likely to have heard of GDPR than those in medium and large organisations.

Table 2.1: Percentage who have heard of GDPR by size of organisation

<table>
<thead>
<tr>
<th></th>
<th>Micro 2-9</th>
<th>Small 10-49 (c)</th>
<th>Medium 50-249 (e)</th>
<th>Large 250+ (f)</th>
<th>Overall (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Businesses</td>
<td>31%</td>
<td>49% ab</td>
<td>66% ab</td>
<td>80% abce</td>
<td>38% b</td>
</tr>
<tr>
<td>Charities</td>
<td>37%</td>
<td>47%</td>
<td>53%</td>
<td>75% a</td>
<td>44%</td>
</tr>
</tbody>
</table>

Notes
1. Based on a sample base of 1519 businesses (excluding sole traders and agriculture, forestry or fishing businesses) and 569 registered charities, all interviewed from October to December 2017. Please see footnote for further breakdowns.
2. The data is weighted by various characteristics to ensure that figures are nationally representative of all UK organisations (within the scope of the survey). Percentages presented here are based on the weighted data.
3. The letters next to the numbers above show statistical significance. For example, “38%b” under Overall shows that 38% of businesses overall had heard of GDPR, and that this was significantly higher than the 31% that had heard of GDPR in column (b) – the Micro businesses.

Awareness among charities by income level follows a similar pattern to size measured by the number of employees, volunteers or trustees.

Table 2.2: Charities awareness of the GDPR by income band

<table>
<thead>
<tr>
<th></th>
<th>Less than £10,000 (b)</th>
<th>£10,000 to less than £100,000 (c)</th>
<th>£100,000 to less than £500,000 (d)</th>
<th>£500,000 to less than £5 million (e)</th>
<th>Over £5 million (f)</th>
<th>Overall (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charities</td>
<td>36%</td>
<td>38%</td>
<td>65%abc</td>
<td>85%abcd</td>
<td>90%abc</td>
<td>44%</td>
</tr>
</tbody>
</table>

Notes
1. Based on a sample base of 569 registered charities. Of which: Less than £10,000 (86), £10,000 to less than £100,000 (121), £100,000 to less than £500,000 (138), £500,000 to less than £5 million (128), over £5 million (82).
2. The data is weighted by various characteristics to ensure that figures are nationally representative. Percentages presented here are based on the weighted data.
3. The letters next to the numbers above show statistical significance. For example, “65%abc” under £100,000 to less than £500,000 shows that 65% of charities in that income bracket had heard of GDPR, and that this was a significantly higher level of awareness than those shown in columns (a), (b) and (c), the “overall” “less than £10,000” and “£10,000 to less than £50,000” categories respectively.

1 Based on numbers of employees for businesses and based on numbers of employees/volunteers/trustees for charities. Micro – 2-9, Small – 10-49, Medium – 50-249, Large 250 plus.
Businesses base sample sizes: Overall (1519); Micro (655), Small (349), Medium (263), Large (252).
Charities bases: Overall (569); Micro (131), Small (251), Medium (121), Large (63)
**Businesses**

- The finance and insurance; information or communications; and the education sectors have the highest awareness of GDPR (79%, 67% and 52% respectively). These are significantly higher than the average.
- Meanwhile, construction and the production & manufacturing sectors are among the sectors with the lowest awareness (25% and 27% awareness respectively), significantly less than the average.
- Awareness is higher among businesses reporting that senior managers consider cyber security a fairly high or very high priority. Just over two fifths (43%) of those placing a high priority on cyber security are aware, significantly higher than those who say it is a low priority (23%).

**Charities**

- There is no statistically significant difference between charities who report that senior managers consider cyber security a fairly high or very high priority, compared to those charities whose senior managers consider it a fairly low or very low priority.
Chapter 3: General preparations for the incoming regulation

The question asked was: Has your organisation made any changes (or not) to the way you operate in response to GDPR?

This question focused on all businesses and charities who had expressed awareness in GDPR. The question is not confined to cyber security changes and may include other changes that have been implemented.

Businesses
- Of those that were aware of the regulation, just over a quarter of businesses (27%) and charities (26%) have made any changes to how they operate, directly as a response to the forthcoming changes to the data protection regulation.
- As with awareness, large and medium businesses are significantly more likely to have made changes than small and micro businesses, with 48 per cent of medium and 55 per cent of large businesses having done so by the time of fieldwork.
- Businesses in the financial and insurance sector are the most likely to have made changes (54%). This is significantly higher than the average. Retail and wholesale is the sector the least likely to have made changes at 13 per cent, which is significantly lower than the average.

Charities
- For charities, 66 per cent of those in the largest income band (£5 million and over) have made changes. This is significantly higher than the average (26 per cent).
- Meanwhile, 13 per cent of those in the lowest income band (<£10,000) had made changes, though this is insignificantly different from the average.
- There is therefore a similar pattern to awareness with lower income charities less likely to have made changes.

For both businesses and charities a significantly higher proportion of those that stated cyber security is a fairly high or very high priority for their senior managers have made changes in response to the new regulation, compared to those that placed a fairly low or very low priority on cyber security (29% and 36% for businesses and charities respectively with a high cyber priority compared to 15% and 11% for those with a low cyber priority). It should be noted that changes implemented may not be limited to cyber security practices or policies.
Chapter 4: Cyber security preparations for the incoming regulation

The questions asked were:

- Have any of these changes been related to your cyber security policy or processes (or not)?
- If yes (you have made cyber security-related changes), what changes have you made relating to your cyber security policy and processes?

These two questions focused on all businesses and charities who had said they were aware of GDPR and had implemented changes in preparation for it. It asks them whether they have specifically implemented cyber security changes in response to the change and, if they had, asks them what cyber security changes they have implemented.

The sample sizes involved are small in this section, and therefore findings should be treated as indicative.

- Of those that have made changes to how they operate, around half of businesses (49%) and over a third of charities (35%) say some of these changes relate to their cyber security practices. There is no statistically significant difference between the two groups.

Figure 4.1 below illustrates the most common cyber security changes which businesses and charities have made in advance of GDPR’s introduction in May 2018. The most common such change made, to date, is to create or change cyber security policies or procedures, across both businesses and charities (36% each). The prevalence of other changes made differs between businesses and charities, though again for charities these results are indicative only.
Figure 4.1: Most common changes to cyber security practices in response to GDPR, 2018

- Created or changed policies and procedures: 36% (Businesses), 36% (Charities)
- Additional staff training or communications: 10% (Businesses), 21% (Charities)
- Deployed new systems: 7% (Businesses), 12% (Charities)
- Formal post-incident review: 7% (Businesses), 2% (Charities)
- Created or changed back-up plans: 7% (Businesses), 4% (Charities)
- Changed which users have admin/access rights: 7% (Businesses), 4% (Charities)
- Installed, changed or updated anti-virus etc. software: 12% (Businesses)
- Changed or updated firewall: 6% (Businesses), 9% (Charities)
- Encryption of data: 5% (Businesses), 10% (Charities)
- Outsourced cyber security: 1% (Businesses), 5% (Charities)

Base: 174 businesses, 70 charities. The small base size for charities means the figures should only be considered as indicative.
Chapter 5: Next Steps

In future weeks and months, DCMS plans to do the following:

- **Publish the key findings from the full Cyber Security Breaches Survey** – this will be available once the full dataset has been quality assured and analysed. This is currently expected to be published in April 2018.

- **Carry out qualitative interviews on a subsample of businesses and charities** - DCMS has commissioned Ipsos MORI, working with the Institute for Criminal Justice Studies at the University of Portsmouth, to carry out qualitative interviews with a subsample of the businesses and charities that form the Cyber Security Breaches Survey. This project will provide further insight into organisations’ attitudes and actions regarding specific aspects of cyber security. This study is expected to be carried out during spring 2018.

- **Publish “deep dive” results based on the qualitative studies.** The precise date of this is to be confirmed but these are currently expected from summer 2018 to winter 2018/19.
1. The next update to these statistics will be the full report for the results of the whole 2018 Cyber Security Breaches Survey. This is scheduled to be published in April 2018.


3. The responsible statistician for this release is Rishi Vaidya. For enquiries on this release, please contact Rishi on 0207 211 2320 or evidence@culture.gov.uk.

4. For general enquiries contact:
   Department for Digital, Culture, Media and Sport
   100 Parliament Street
   London
   SW1A 2BQ
   Telephone: 020 7211 6000

5. DCMS statisticians can be followed on Twitter via @DCMSInsight.

6. The Cyber Security Breaches Survey is an Official Statistics publication and has been produced to the standards set out in the Code of Practice for Official Statistics. For more information, see http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf. Details of the pre-release access arrangements for this dataset have been published alongside this release.